

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS					
				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
				Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
				Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
				Large Fab ☐	Composite ☐	Supplier ☐			
Date : 16/6/22		Step #: 100		QTY Effective : _____			MRB (QSI042) Approval DAS 12 9-89		
Description Work Order Deviation				Disposition					
Engraving flt too deep. 0.015 over tolerance				Acceptable					
				Completed By DAS 12 9-89					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Work Order ID 146955

Tuesday, May 24, 2016 10:03:56 AM

146955

Page 3

Item ID: D5957

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle

Start Date: 5/11/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 5/24/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

Identify as per dwg & Stock Location: ST399

0.00

160

Packaging

Memo

0.04

Packaging

10 JUN 29 2016

D46
6
9-89

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Memo

0.40

Quality Control

16/6/29/16
SA 6/29/16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Tuesday, May 24, 2016 10:03:56 AM

Page 1
T

Work Order ID: 146955

146955

Parent Item: D5957

D5957

Parent Item Name: Saddle

Start Date: 5/11/2016

Required Date: 5/24/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:E Re-Format 05-11-29 JLM
IPP Rev:F ecn826 06.12.06 ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007		Manufactured	No			110	Each	67.0000	1	4			
D6101-007									**	DAS			
Saddle Billet										44			
										9-89		16-06-16	

Location

Loc Qty

Loc Code

MAT041

67

142578

7

143818

40

~~144497~~

20

10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

DART AEROSPACE LTD		Work Order:	146 955
Description: Inner Aft Saddle		Part Number:	D5957
Inspection Dwg: D5957	Rev: B	Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	5.245	5.255		5.250	5.250	5.250	5.250		
D	6.995	7.005		7.000	7.000	7.000	7.000		
E	5.240	5.260		5.250	5.250	5.250	5.250		
F	4.745	4.755		4.750	4.750	4.750	4.750		
G	0.315	0.322		.316	.316	.316	.316		
H	1.522	1.532		1.527	1.527	1.527	1.527		
I	3.048	3.058		3.053	3.053	3.053	3.053		
J	4.575	4.585		4.580	4.580	4.580	4.580		
K	0.315	0.322		.316	.316	.316	.316		
L	0.495	0.505		.500	.500	.500	.500		
M	0.490	0.510		.500	.500	.500	.500		
N	1.865	1.885		1.875	1.875	1.875	1.875		
O	7.990	8.010		8.000	8.000	8.000	8.000		
P	2.240	2.260		2.250	2.250	2.250	2.250		
Q	0.308	0.313		.311	.311	.311	.311		
R	0.760	0.765		.760	.760	.760	.760		
S	0.490	0.510		.498	.500	.500	.500		
T	1.625	1.645		1.6275	1.6275	1.6275	1.6275		
U	2.000	2.020		2.0025	2.0025	2.0025	2.0025		
V	0.023	0.043		.033	.033	.033	.033		
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									

Accept/Reject

DAS

Measured by:	44
Date:	9-99 16-06-18

Audited by:	33
Date:	9-99 16/06/21

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.11.20	Added dimension V	KJ/JLM	
D	06.12.06	Dimensions L,N,P revised	KJ/EC	
E	07.06.15	Dimension G revised	KJ/JLM	
F	08.04.21	Dimension E revised	KJ/DD	
G	08.09.05	Dimension K revised	KJ/DD	
H	09.07.29	Dimension Q revised	KJ	

DART AEROSPACE LTD		Work Order: 176955
Description: Inner Aft Saddle		Part Number: D5957
Inspection Dwg: D5957	Rev: B	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				5	6	7	8		
A	0.438	0.443		.438	.438	.438	.438		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	5.245	5.255		5.250	5.250	5.250	5.250		
D	6.995	7.005		7.000	7.000	7.000	7.000		
E	5.240	5.260		5.250	5.250	5.250	5.250		
F	4.745	4.755		4.750	4.750	4.750	4.750		
G	0.315	0.322		.316	.316	.316	.316		
H	1.522	1.532		1.527	1.527	1.527	1.527		
I	3.048	3.058		3.053	3.053	3.053	3.053		
J	4.575	4.585		4.580	4.580	4.580	4.580		
K	0.315	0.322		.316	.316	.316	.316		
L	0.495	0.505		.500	.500	.500	.500		
M	0.490	0.510		.500	.500	.500	.500		
N	1.865	1.885		1.875	1.875	1.875	1.875		
O	7.990	8.010		8.000	8.001	8.000	8.000		
P	2.240	2.260		2.250	2.250	2.250	2.250		
Q	0.308	0.313		.311	.311	.311	.311		
R	0.760	0.765		.760	.760	.760	.760		
S	0.490	0.510		.499	.499	.499	.499		
T	1.625	1.645		1.6275	1.6275	1.6275	1.6275		
U	2.000	2.020		2.0025	2.0025	2.0025	2.0025		
V	0.023	0.043		.033	.033	.033	.033		
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									

Accept/Reject

DAS

Measured by: 44	Audited by: 33
Date: 9-89 16-06-18	Date: 9-89 16/06/21

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.11.20	Added dimension V	KJ/JLM	
D	06.12.06	Dimensions L,N,P revised	KJ/EC	
E	07.06.15	Dimension G revised	KJ/JLM	
F	08.04.21	Dimension E revised	KJ/DD	
G	08.09.05	Dimension K revised	KJ/DD	
H	09.07.29	Dimension Q revised	KJ	

DART AEROSPACE LTD		Work Order: 146955
Description: Inner Aft Saddle		Part Number: D5957
Inspection Dwg: D5957	Rev: B	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing and record below:

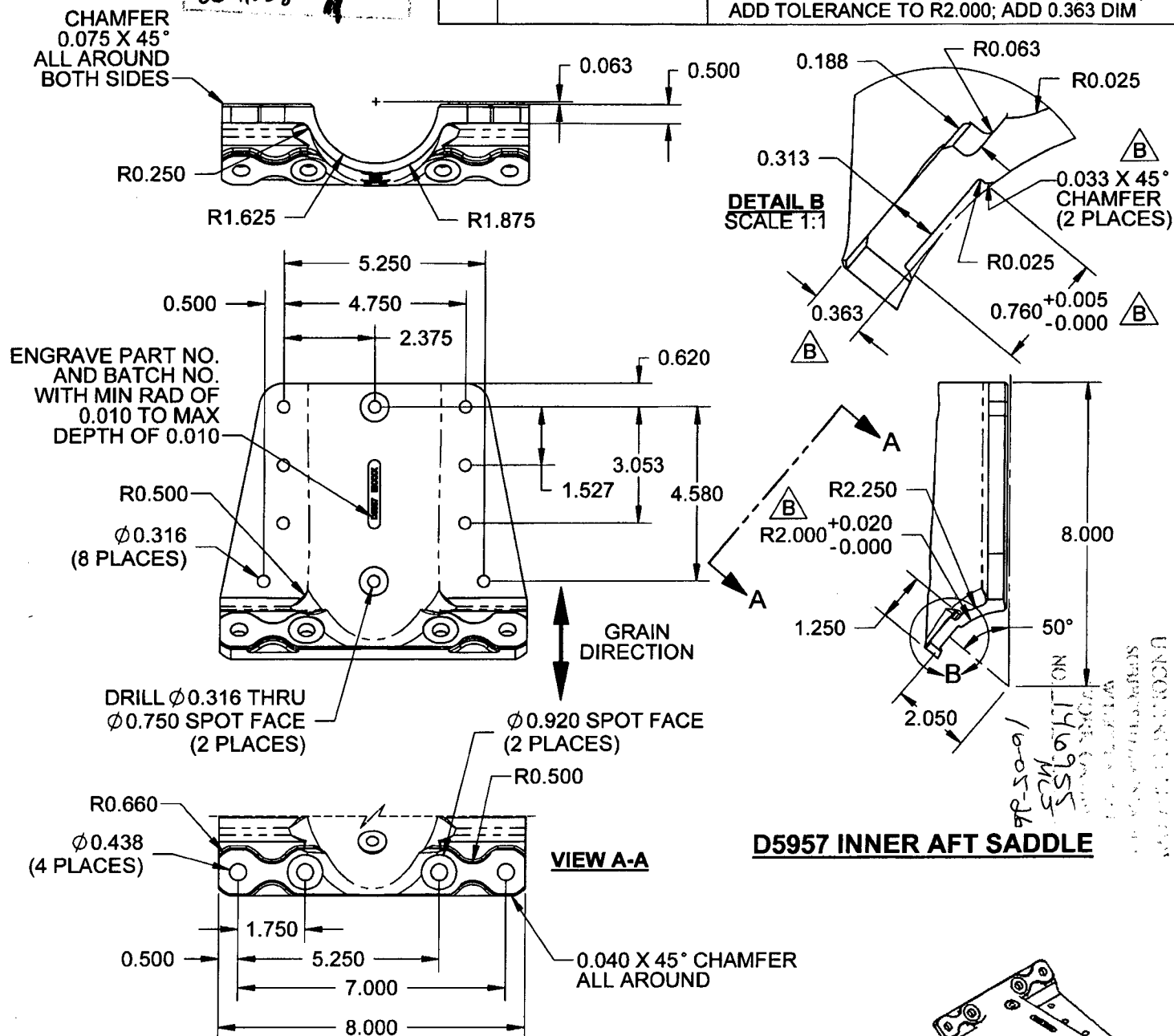
				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	9	10	3	4		
A	0.438	0.443		.438	.438				
B	1.745	1.755		1.750	1.750				
C	5.245	5.255		5.250	5.250				
D	6.995	7.005		7.000	7.000				
E	5.240	5.260		5.250	5.250				
F	4.745	4.755		4.750	4.750				
G	0.315	0.322		.316	.316				
H	1.522	1.532		1.527	1.527				
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K	0.315	0.322		.316	.316				
L	0.495	0.505		.500	.500				
M	0.490	0.510		.499	.500				
N	1.865	1.885		1.875	1.875				
O	7.990	8.010		8.000	8.000				
P	2.240	2.260		2.250	2.250				
Q	0.308	0.313		.311	.311				
R	0.760	0.765		.760	.760				
S	0.490	0.510		.500	.500				
T	1.625	1.645		1.6275	1.6275				
U	2.000	2.020		2.0025	2.0025				
V	0.023	0.043		.033	.033				
W									
X									
Y									
Z									
AA									
AB									
AC									
AD									
AE									
AF									
Accept/Reject							DAS		

Measured by: 44	Audited by: 33
Date: 9-89 16-06-19	Date: 9-89 16/06/21

Rev	Date	Change	Revised by	Approved
A	99.04.19	New Issue	RF	
B	02.12.13	Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B	KJ/RF	
C	06.11.20	Added dimension V	KJ/JLM	
D	06.12.06	Dimensions L,N,P revised	KJ/EC	
E	07.06.15	Dimension G revised	KJ/JLM	
F	08.04.21	Dimension E revised	KJ/DD	
G	08.09.05	Dimension K revised	KJ/DD	
H	09.07.29	Dimension Q revised	KJ	

DART

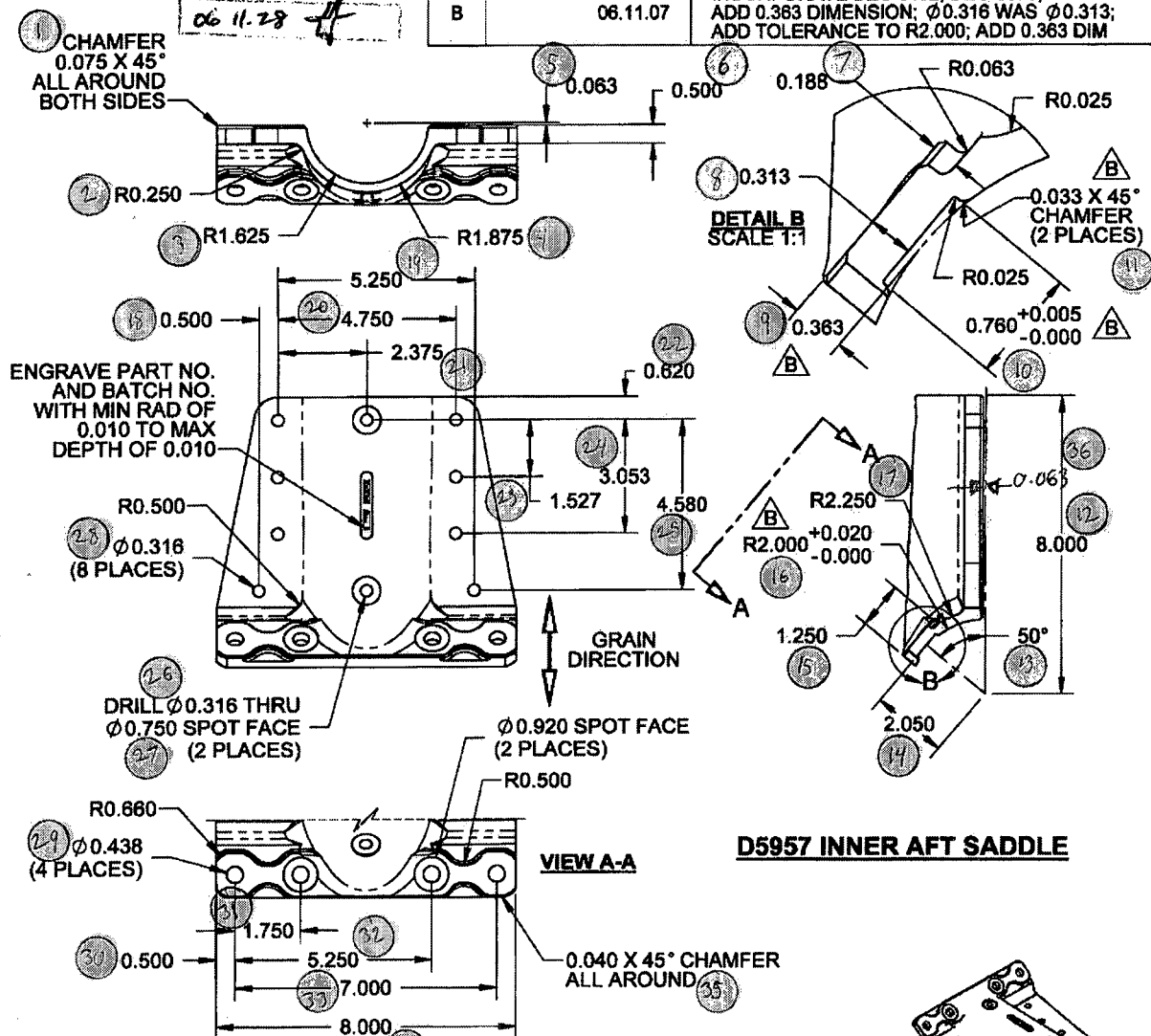
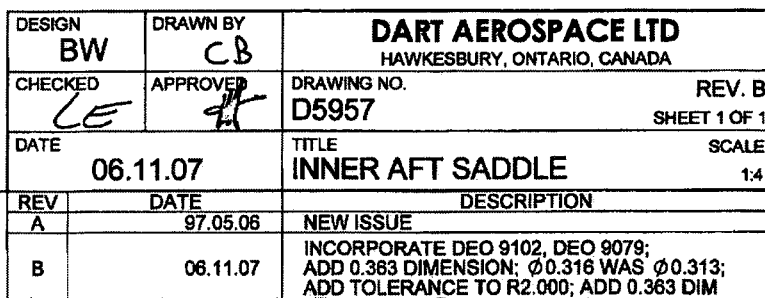
DESIGN BW	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D5957	REV. B SHEET 1 OF 1
DATE 06.11.07	TITLE INNER AFT SADDLE		SCALE 1:4
REV A	DATE 97.05.06	DESCRIPTION NEW ISSUE	
B	06.11.07	INCORPORATE DEO 9102, DEO 9079; ADD 0.363 DIMENSION: $\phi 0.316$ WAS $\phi 0.313$; ADD TOLERANCE TO R2.000; ADD 0.363 DIM	

**NOTES:**

- 1) MATERIAL: ALUMINUM 7075-T7351 PER QQ-A-250/12
(MAKE FROM D6101-007 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020

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NOTES:

- NOTES:**
- 1) MATERIAL: ALUMINUM 7075-T7351 PER QQ-A-250/12
(MAKE FROM D6101-007 SADDLE BILLET, 7075)
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (4.3.5.1) PER DART QSI 005 4.3 B
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK ALL SHARP EDGES 0.010 TO 0.020

ISOMETRIC VIEW
SCALE 1:8

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